



EE170

Energy Management: *Certified Energy Professionals*

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- Get certified as a "Certified Energy Professional"
- Recognize the need for energy management as well as conduct energy audit, audit reports and energy audit instrumentation
- Explain energy codes, standards and protocols as well as energy purchasing, accounting and benchmarking
- Discuss energy and electricity rate structures and carryout electrical systems, electric energy management, economic analysis and life cycle costing
- Determine lighting basics and lighting system improvements as well as electric motors, industrial systems and thermal energy storage
- Apply boilers and thermal systems improvement and discuss waste heat, co-generation and CHP systems
- Identify renewable energy sources and employ maintenance programs and building commissioning, automation and control systems
- Describe M&V, alternative financing, green buildings and LEED
- Enumerate various units, conversions, charts, tables and list of acronyms provided

Who Should Attend?

This course is designed for energy professionals including production, maintenance, safety, environment and quality department engineers and section heads.

Course Outline:

DAY 1:

- The Need for Energy Management
- Conducting an Energy Audit, Audit Reports & Energy Audit Instrumentation
- Energy Codes, Standards & Protocols

DAY 2:

- Energy Purchasing, Accounting & Benchmarking

- Energy & Electricity Rate Structures
- Electrical Systems & Electric Energy Management
- Economic Analysis & Life Cycle Costing

DAY 3:

- Lighting Basics & Lighting System Improvements
- Electric Motors & Industrial Systems
- Thermal Energy Storage
- Boilers & Thermal Systems Improvement

DAY 4:

- Waste Heat, Co-Generation, CHP Systems
- Renewable Energy Sources
- Maintenance Programs & Building Commissioning
- Building Automation & Control Systems

DAY 5:

- M&V & Alternative Financing
- Green Buildings & LEED
- Units & Conversions
- Charts, Tables & List of Acronyms



Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test

- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Fees:

To be advised as per the course location. This rate includes participant's manual, and-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session

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